

ABSTRACT

Analisa Pengaruh Filter Kernel Terhadap Reduksi *Noise* dan Detail Gambar Pada Citra CT Scan Kepala Daerah *Temporal* pada CT Scan GE 64 Slice *Lightspeed*

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This study aims to determine the optimal kernel filter to reduce noise in CT Scan head Temporal regional. This study was descriptive retrospective with the sampling technique is simple random sampling. This research was conducted by taking the data CT scan protocol head without contrast Temporal area that already exists on the installation of radiological CT Scan at Airlangga University hospital and then That data reconstructed into a 3 filter E1, E2, E3. Results A total of 14 image of each filter assessed noise and details with a questionnaire by the radiologist (respondent) and the measured value of noise using ImageJ. Results at the ImageJ showed that of the three filters noise is still within tolerance. Filter E2 its recommendation for non-contrast head CT examination of the temporal part because produces detail and noise in the category of "good", meanwhile another filters just good in one point. Based on the results from this research, CT scan GE 64 Slice Lightspeed for CT Scan non-contrast head CT examination on the part tempooral filter E2 can use for more informative picture.

Kata Kunci : Filter Kernel, *Temporal*, *Noise*, E1, E2, E3

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